American Artisan

January-December 1954 — Vol. 91, Nos. 1-12

Published monthly by the Keeney Publishing Company, 6 N. Michigan Ave., Chicago 2, Ill.

This index does not include Equipment Developments; New Literature; What the Associations Are Doing; We Hear That; Appointments—departments appearing regularly in each issue. The Editor's Notebook and What's Happening in each issue include items of news, comments on current events, etc. In the January issue a complete directory section was published covering warm air heating, residential air conditioning and sheet metal products.

Titles of articles in this index have been placed under both general and specific headings to make it easier for the reader to locate any subject quickly. For instance if it is desired to find an article on Radio and TV advertising, it will be found under the specific heading for Radio and TV and also under the general heading of Advertising

Advertising

Cold Canvassing = Hot Leads, October 72
Dealer Uses TV to Sell Heating, July 75
Frequent Ads Help Dealer, October 93
Homer Selch's Scrapbook — a 40 Year Success Story, June 62
How to Maintain Sales, June 80
"Let 'Em Know What You've Got to Sell," November 102
Paint Your Portrait With Business Cards, October 88
Paraphrases TV Show to Sell Heating, March 96
Sell Residential Cooling, June 55
Sheet Metal Shop Its Own Best Ad, April 62
"The Show's the Thing," June 47
35 Ways to Increase Sheet Metal Sales, October 94
TV Connects to Sell Conversion Jobs August 98
Versatile Dealer Attracts Customers, May 70
"Wham" — Sales Punch at Local Level, May 65
What's Your Best Advertising Medium? March 74
"Why Stop Neatness at the Sales Level?," May 61

Air Conditioning

"Advancement of the Industry," March 90
Air Conditioning Boom, December 59
Artisan Reports on Window Air Conditioners, April 50
Combination Load Estimating Form, July 58
"Cooling's a Real Market," April 95
Cooling System Trouble Shooting, March 56
Cooling Unit Is No "Nuisance," March 82
Heating Wholesalers Told "Cooling Is Good Business," January 124
Home Builders Like Cooling, February 66
How a Heat Pump Meets Heating, Cooling Needs in Cold Climates, December 99
How Home Cooling Systems Are Lubricated, October 76
How Home Owners Like Air Conditioning, May 62
How Metering Devices Keep Cooling Coils Efficient, August 48
How Much Does Insulation Save in Air Conditioning a Home?, March 66
How to Add Cooling to Home Built on Crawl Space, January 90
How to Diagnose What's Wrong in an Air Conditioning System, February 44
How to Replace Cooling System Parts, April 66
How to Service Hermetic Units, July 48
How to Team Up Heating and Cooling, August 71
Installing Window Units in Large Buildings, October 108
Know your Refrigerants, September 74
Now That The "Boom" Is Here—Where Will Air Conditioning Be Sold?, December 60
Panels Talk About Home Cooling at OHI Meeting, July 92
Products, Service, Sales Techniques, April 107
Quality Produces Quantity, September 52
Replacing Parts in Sealed Cooling Systems, May 72
Residential Air Conditioning — How's It Going?, September 69
Residential Cooling Potential Predicted, July 68
Revise Standards for FHA Insurable Heating and Cooling Equipment, May 49
Room Air Distribution for Year 'Round Air Conditioning, October 116
Selling Mechanical Cooling for Homes In Dry Climates, January 118
Sell Residential Cooling, June 55
Techniques for Charging a Refrigerating System, December 80
Where to Look for Air Conditioning Troubles, November 79
Year 'Round Perimeter System for Branch Bank, June 48
Year 'Round Program for Year 'Round Cooling Sales, July 60
You Can Guarantee Year 'Round Comfort, September 61

Air Handling

Cooling System Trouble Shooting, March 56
Economical Duct Layouts, January 98
Four Zone Perimeter Heating, January 96
Heated Slab, Baseboard Registers Maintain Low Temperature Differentials, February 50
How to Check and Balance Warm Air Heating Systems, May 66
How to Diagnose What's Wrong in an Air Conditioning System, February 44
How to Team Up Heating and Cooling, August 71
Industrial Ventilation Conference, August 54
Making a Double Elbow with Different Size Branch Ducts, February 54
Modern Ductwork — New Techniques, New Problems, February 58
Room Air Distribution for Year 'Round Air Conditioning, October 116
Studies Air Pressure Loss in Louvers, March 75
Tips on Installing, Servicing, Business Methods, April 68

Apprenticeship

Another Step Forward, December 73
Apprentices Needed to Meet Population Growth, November 29
Contractors Get the Picture, June 58
One Method for Figuring Overhead, March 64
Tips on Trouble Shooting, Servicing, June 72
"We Need More Trained Apprentices," February 52

Bidding

Argue for "Bid-Peddling" Bill, March 41
Association Helps Solve Problems, August 94
Contractors Get the Picture, June 58
How Much Does Insulation Save in Air Conditioning a Home?, March 66
"We Need More Trained Apprentices," February 52

Bookkeeping

Cashing in on the New Tax Law, November 75

Goal: Lower Operating Costs, September 51
Help Yourself to Extra Shop Time ..... September 56
How to Have a Successful Employees' Christmas Party, November 86
One Method for Figuring Overhead, ... March 64
Products, Service, Sales Techniques, ... April 107
Profit — Business' Sparkplug, November 71
Quality Produces Quantity September 52
Save Cash for Employees Under New Tax Law, ... December 88
Sheet Metal Installed by "Remote Control," ..... July 82

Business Management

"A Profit a Day," ..... November 128
Air Conditioning Boom, December 59
Are Verbal Contract Changes Valid? ..... May 95
Cashing in on the New Tax Law, ... November 75
Cooling Unit Is No "Nuisance," March 82
Dealer Keeps Ideas on Tap, March 84
Dealer Must Pay Sales Commissions ..... April 91
Dealer Pays for Misrepresentations, ... January 128
Dealer's Prescription for Growth, July 66
5¼ Hours to Install Warm Air Heating System, ... February 40
Goal: Lower Operating Costs, September 51
Help Yourself to Extra Shop Time, ... September 56
How Complete Must Customer Instructions Be? ..... November 123
How to Keep Truck Costs Down, May 76
It's Good Business to Incorporate, September 108
"Let 'Em Know What You've Got to Sell," ..... November 102
Need Landlord's OK for Window Unit?, ... July 98
Now That The "Boom" Is Here — Where Will Air Conditioning Be Sold?, ... December 60
On Picking the Right Man, October 71
Paint Your Portrait With Business Cards, ... October 88
Products, Service, Sales Techniques, ... April 107
Profit — Business' Sparkplug, November 71
"Profit Is Essential to Business," April 49
Quality Produces Quantity, September 52
Save Cash for Employees Under New Tax Law, ... December 88
Sheet Metal Installed by "Remote Control," ..... July 82
Sheet Metal Shop Proves —"Versatility Brings Success," January 108
Success Factors "from A to Z," May 86
What Business Costs Are Deductible?, ... February 70
What's Your Best Advertising Medium? ..... March 74
When Is Employer Liable for Employees' Injuries?, ... June 86
When You Sign a Lease ..October 139
Who Is Responsible for Electric Current Supply?, ... December 108
You May Be Liable, ... August 90

Codes

Air Filter Code, ... March 72
Propose New Code For Furnaces, Unit Heaters, ... September 113
Reciprocal Licensing — a "Test Run," ..... January 121
Solving Crawl Space Heating Problems, ... April 64
Tips on Installing, Servicing, Business Methods, ... April 68
You Can Guarantee Year 'Round Comfort, ... September 61

Combustion

Case of the Poorly Heated Parsonage, ... December 74
Cooling System Trouble Shooting, March 56
How Much More Heat Needed for Outside Air Intakes?, ...January 86
Providing Ventilation, Combustion Air for Confined Heating Units, October 84
Tips on Trouble Shooting, Servicing, ... June 72

Control of Systems

Electrical Wiring for Window Air Conditioners, ... April 59
How to Check and Balance Warm Air Heating Systems, ... May 66
How to Service Hermetic Units, July 48
Quality Produces Quantity, September 52
Tips on Trouble Shooting, Servicing, ... June 72

Cost Accounting

Contractors Get the Picture, ..June 58
Goal: Lower Operating Costs, September 51
Help Yourself to Extra Shop Time, ... September 56
How to Keep Truck Costs Down, May 76
One Method for Figuring Overhead, ... March 64
Sheet Metal Installed by "Remote Control," ..... July 82

Crawl Space Heating Systems

How to Control Moisture in Heated and Unheated Crawl Spaces, ... May 74
"I'd Use Crawl Space for Return Air," ..... October 144
Perimeter Heating for Crawl Space Homes, ... March 62
Solving Crawl Space Heating Problems, ... April 64
What to Do When Installing a Crawl Space Heating System, November 84

Credit

FHA Credit Opens the Door for Dealers, ... December 29
Products, Service, Sales Techniques, ... April 107

Curtain Wall

Contractors Get the Picture, June 58
Curtain Wall Panels for Skylights, August 64
How to Maintain Sales, ... June 80
Plant Expansion Easier With Curtain Wall Panels, ... June 52

Dealer Operations

Cold Canvassing = Hot Leads, October 72
Dealer Closes Many Sales, January 94
Dealer Keeps Ideas on Tap, March 84
Dealer's Prescription for Growth, July 66
English Sheet Metal Work Is Different, ... May 90
5¼ Hours to Install Warm Air Heating System, ... February 40
Help Yourself to Extra Shop Time, ... September 56
Homer Selch's Scrapbook — a 40 Year Success Story, ...June 62
How to Beat "Price Squeeze," September 66
How to Check and Balance Warm Air Heating Systems ..... May 66
How to Keep Truck Costs Down, May 76
Quality Produces Quantity, September 52
Sheet Metal Installed by "Remote Control," ..... July 82
Sheet Metal Shop Its Own Best Ad, ... April 62
Sheet Metal Shop Produces "Just What the Customer Orders," March 58
Sheet Metal Shop Proves — "Versatility Brings Success," January 108
Triple-Barreled Installation for Hard-to-Heat Restaurant, October 131
TV Connects to Sell Conversion Jobs, ... August 98
Versatile Dealer Attracts Customers, ... May 70
"World's Biggest Sheet Metal Job," ..... August 84
Year 'Round Program for Year 'Round Cooling Sales, ... July 60

Ducts

"Cooling's a Real Market," April 95
Developing a Layout for a Tapered Shoe Tee, ...December 76

Dust Collector Inlet Arm, September 94
Economical Duct Layouts, January 98
5¼ Hours to Install Warm Air Heating System, February 40
Grinder Suction Hood Guard, November 94
How to Reduce Transmission of Machinery Noise, March 78
Making a Double Elbow with Different Size Branch Ducts, February 54
Making an Inlet Arm for a Dust Separator, August 58
Making a 90 Degree Offset Elbow, July 62
Making a 90 Degree Riser Hood, May 78
Making a Polishing Wheel Guard and Hood, October 81
Making a Three Piece 90 Degree Square to Round Elbow Hood, June 64
Making a Two Piece 90 Degree Elbow, July 100
Making a Ventilator Base for Roof Peaks, March 76
Modern Ductwork — New Techniques, New Problems, February 58
Producing 15,000 Lb of Duct per Day, June 68
Products, Service, Sales Techniques, April 107
Special Hood for Partly Round Tank, January 112
Studies Air Pressure Loss in Louvers, March 75
"World's *Biggest* Sheet Metal Job," August 84
Year 'Round Perimeter System for Branch Bank, June 48

Dust Collection

Developing a Layout for a Tapered Shoe Tee, December 76
Dust Collector Inlet Arm, September 94
Making an Inlet Arm for a Dust Separator, August 58
Making a 90 Degree Offset Elbow, July 62

Editorials

Air Conditioning Boom, December 59
"Don't-Do-It-Yourself" Campaign, August 47
Goal: Lower Operating Costs, September 51
Looking Ahead for '54, January 85
No One-Ingredient Recipe for Success, March 55
On Picking the Right Man, October 71
Profit — Business' Sparkplug, November 71
"Profit Is Essential to Business," April 49
Service Department Can Pay Its Way, February 39
"Show's the Thing," June 47
"Thanks for a Job Well Done," July 47
"Why Stop Neatness at the Sales Level?," May 61

Engineering

Case of the Poorly Heated Parsonage, December 74
Combination Load Estimating Form, July 58
Cooling Load Estimate Form for Room Air Conditioners, April 56
Cooling System Trouble Shooting, March 56
Electrical Wiring for Window Air Conditioners, April 59
5¼ Hours to Install Warm Air Heating System, February 40
Four Zone Perimeter Heating, January 96
Heated Slab, Baseboard Registers Maintain Low Temperature Differentials, February 50
How a Heat Pump Meets Heating, Cooling Needs in Cold Climates, December 99
How Much More Heat Needed for Outside Air Intakes?, January 86
How to Add Cooling to Home Built on Crawl Space, January 90
How to Beat "Price Squeeze," September 66
How to Reduce Heat Losses from Heated Crawl Spaces, June 56
How to Reduce Transmission of Machinery Noise, March 78
How to Select Wall Furnaces, August 52
How to Team Up Heating and Cooling, August 71
Know Your Refrigerants, September 74
Modern Ductwork — New Techniques, New Problems, February 58
Perimeter Heating for Crawl Space Homes, March 62
Room Air Distribution for Year 'Round Air Conditioning, October 116
Selecting and Installing Window Air Conditioners, April 54
Sheet Metal Installed by "Remote Control," July 82
Small Schoolhouse Heated With Perimeter Loop System, August 56
Venting Gas Fired Heating Equipment, September 63
Year 'Round Perimeter System for Branch Bank, June 48
You Can Guarantee Year 'Round Comfort, September 61

Engineering Design Data

Artisan Reports on Window Air Conditioners, April 50
Combination Load Estimating Form, July 58
Cooling Load Estimate Form for Room Air Conditioners, April 56
Economical Duct Layouts, January 98
Heated Slab, Baseboard Registers Maintain Low Temperature Differentials, February 50
How a Heat Pump Meets Heating, Cooling Needs in Cold Climates, December 99
How Much Does Insulation Save in Air Conditioning a Home?, March 66
How Much More Heat Needed for Outside Air Intakes? January 86
How to Add Cooling to Home Built on Crawl Space, January 90
How to Reduce Heat Losses from Heated Crawl Spaces, June 56
How to Reduce Transmission of Machinery Noise, March 78
How to Team Up Heating and Cooling, August 71
Know Your Refrigerants, September 74
Perimeter Heating for Crawl Space Homes, March 62
Propose New Code for Furnaces, Unit Heaters, September 113
Providing Ventilation, Combustion Air for Confined Heating Units, October 84
Room Air Distribution for Year 'Round Air Conditioning, October 116
Slab Floor Heat Losses Reduced with Edge Insulation, January 106
Small Schoolhouse Heated With Perimeter Loop System, August 56
Solving Crawl Space Heating Problems, April 64
Venting Gas Fired Heating Equipment, September 63
Year 'Round Perimeter System for Branch Bank, June 48
You Can Guarantee Year 'Round Comfort, September 61

Estimating

Artisan Reports on Window Air Conditioners, April 50
Combination Load Estimating Form, July 58
Cooling Load Estimate Form for Room Air Conditioners, April 56
5¼ Hours to Install Warm Air Heating System, February 40
Selecting and Installing Window Air Conditioners, April 54
Success Factors "from A to Z," May 86
Year 'Round Perimeter System for Branch Bank, June 48

Evaporative Cooling

How to Service Evaporative Coolers, July 79

FHA

Cold Canvassing = Hot Leads, October 72
FHA Authorizes New Service to Home Buyers, October 134
FHA Credit Opens the Door for Dealers, December 29
FHA Loan Hearings Turn Up Abuses—May Mean Revamp of Agency, October 29
Home Builders Like Cooling, February 66
New Housing Act to Affect Loans, April 41
Revise Standards for FHA Insurable Heating and Cooling Equipment, May 49

Fabrication

Atom Improves Metallic Coating Process, ...September 86
Cutting and Forming Stainless Steel, ...July 54
Developing a Layout for a Tapered Shoe Tee, ...December 76
Dust Collector Inlet Arm, September 94
English Sheet Metal Work Is Different, ...May 90
Getting a Smooth Finish on Stainless Steel Welds, ...August 68
Grinder Suction Hood Guard, November 94
Help Yourself to Extra Shop Time, ...September 56
How to Solder Stainless Steel, September 102
How to Beat "Price Squeeze," September 66
How to Surface-Finish Stainless Steel, ...November 72
Making a Double Elbow with Different Size Branch Ducts, February 54
Making an Inlet Arm for a Dust Separator, ...August 58
Making a 90 Deg Offset Elbow, July 62
Making a 90 Deg Riser Hood, May 78
Making a Polishing Wheel Guard and Hood, ...October 81
Making a Slip Lock Duct Fastener, September 100
Making a Three Piece 90 Deg Square to Round Elbow Hood, June 64
Making a Two Piece 90 Deg Elbow, ...July 100
Making a Ventilator Base for Roof Peak, ...March 76
New Roof Keeps "the Old Look," February 48
Producing 15,000 Lb of Duct per Day, ...June 68
Sheet Metal Installed by "Remote Control," ....July 82
Sheet Metal Shop Its Own Best Ad, ...April 62
Sheet Metal Shop Produces "Just What the Customer Orders," March 58
Sheet Metal Shop Proves—"Versatility Brings Success," ....January 108
Special Hood for Partly Round Tank, ...January 112
Tough Welding Job, ...September 71
"World's *Biggest* Sheet Metal Job," ....August 84

Fume Removal

Grinder Suction Hood Guard, November 94
Making a 90 Deg Riser Hood, May 78
Making a Polishing Wheel Guard and Hood, ...October 81
Making a Three Piece 90 Deg Square to Round Elbow Hood, June 64
Special Hood for Partly Round Tank, ...January 112

General Business

"Advancement of the Industry," March 90
Apprentices Needed to Meet Population Growth, ..November 29
Are Verbal Contract Changes Valid?, ...May 95
Argue for "Bid-Peddling" Bill, March 41
Association Helps Solve Problems, August 94
Cites Benefits of Incentive Programs, ...September 106
Construction Prospects Excellent, June 39
Cooling Unit is No "Nuisance," March 82
Current Wage Rates Paid Sheet Metal Workers, ...December 106
Dealer Keeps Ideas on Tap, March 84
Dealer Must Pay Sales Commissions ....April 91
Dealer Pays for Misrepresentations, ...January 128
"Don't-Do-It-Yourself" Campaign, August 47
FHA Credit Opens the Door for Dealers, ...December 29
FHA Loan Hearings Turn Up Abuses ....October 29
FTC Helps Maintain Heating Standards, ...September 27
How BDSA Helps Business, July 39
How Complete Must Customer Instructions Be?, ...November 123
How Home Owners Like Air Conditioning, ...May 62
How to Get Federal Loans, September 88
How to Keep Truck Costs Down, May 76
Ike Urges More Housing In Two Important Messages, ...February 29
Indiana Dealers Eligible for Tax Refunds, ...August 76
It's Good Business to Incorporate, September 108
Need Landlord's OK for Window Unit?, ...July 98
New Commercial Standards for Oil Fired Furnaces, ..September 92
New Housing Act to Affect Loans, April 41
No One-Ingredient Recipe for Success, ...March 55
One Method for Figuring Overhead, ...March 64
Paraphrases TV Show to Sell Heating, ...March 96
"Profit Is Essential to Business," April 49
Residential Air Conditioning—How's It Going?, ...September 69
Restrictions Off Nickel and Nickel Bearing Steel, ...January 39
Revised Tax Law—A Green Light for Business, ...August 39
Revise Standards for FHA Insurable Heating and Cooling Equipment, ...May 49
Service Department Can Pay Its Way, ...February 39
Sheet Metal Contractor Reviews Copper Roofing Film, December 112
Sheet Metal Shop Proves—"Versatility Brings Success," ..January 108
Take Them All Together—They Spell "Service," ....July 91
Use Sales Tools to Build Volume, September 82
Versatile Dealer Attracts Customers, ...May 70
"Wham"—Sales Punch at Local Level, ...May 65
What Business Costs Are Deductible?, ...February 70
What's Your Best Advertising Medium?, ...March 74
When Is Employer Liable for Employees' Injuries?, ...June 86
When You Sign a Lease . . . , October 139
Who Is Responsible for Electric Current Supply?, ...December 108
"Why Stop Neatness at the Sales Level?," ....May 61
You May Be Liable, ...August 90

Heating

"Advancement of the Industry," March 90
Case of the Poorly Heated Parsonage, ...December 74
Dealer Uses TV to Sell Heating, July 75
5¼ Hours to Install Warm Air Heating System, ...February 40
Four Zone Perimeter Heating, January 96
Heated Slab, Baseboard Registers Maintain Low Temperature Differentials, ...February 50
How a Heat Pump Meets Heating, Cooling Needs in Cold Climates, December 99
How Much More Heat Needed for Outside Air Intakes?, January 86
How to Beat "Price Squeeze," September 66
How to Check and Balance Warm Air Heating Systems, ...May 66
How to Control Moisture in Heated and Unheated Crawl Spaces, ...May 74
How to Reduce Heat Losses from Heated Crawl Spaces, ...June 56
How to Select Wall Furnaces, August 52
How to Team Up Heating and Cooling, ...August 71
"I'd Use Crawl Space for Return Air," ....October 144
Modern Home Heated with Perimeter Warm Air System, July 52
New Commercial Standard for Oil Fired Furnaces, ..September 92
New Way to Measure Air Infiltration On the Job, ...September 86
Perimeter Heating for Crawl Space Homes, ...March 62
Propose New Code for Furnaces, Unit Heaters, ...September 113
Providing Ventilation, Combustion Air for Confined Heating Units, ...October 84
Reduce Excessive Heat Loss and Smoke, ...September 91

Room Air Distribution for Year 'Round Air Conditioning, October 116
Small Schoolhouse Heated With Perimeter Loop System, ..August 56
Solving Crawl Space Heating Problems, ...April 64
Tips on Trouble Shooting, Servicing, ...June 72
Triple-Barreled Installation for Hard-to-Heat Restaurant, October 131
Up in the Air, ...October 112
Venting Gas Fired Heating Equipment, ...September 63
Versatile Dealer Attracts Customers, ...May 70
Warm Air Perimeter System Heats Basementless Church, ...March 73
What to Do When Installing a Crawl Space Heating System, November 84
Year 'Round Perimeter System for Branch Bank, ...June 48
You Can Guarantee Year 'Round Comfort, ...September 61

Housing Census

Housing Census Heating Data, January 104
Housing Census Heating Data, March 70
Housing Census Heating Data, July 56
Housing Census Heating Data, August 62
Housing Census Heating Data, September 72
Housing Census Heating Data, October 86
Housing Census Useful to Warm Air Dealer, ...November 89

Humidity

How to Control Moisture in Heated and Unheated Crawl Spaces, ...May 74
Panels Talk About Home Cooling at OHI Meeting, ...July 92
What to Do When Installing a Crawl Space Heating System, November 84

Infiltration

How Much More Heat Needed for Outside Air Intakes?, January 86
New Way to Measure Air Infiltration On the Job, ...September 86

Installations

Artisan Reports on Window Air Conditioners, ...April 50
5¼ Hours to Install Warm Air Heating System, ...February 40
How to Erect Metal Roof Deck, November 108
How to Reduce Transmission of Machinery Noise, ...March 78
Installing Window Units in Large Buildings, ...October 108
Selecting and Installing Window Air Conditioners, ...April 54
Solving Crawl Space Heating Problems, ...April 64
Tips on Installing, Servicing, Business Methods, ...April 68
Venting Gas Fired Heating Equipment, ...September 63
Year 'Round Perimeter System for Branch Bank, ...June 48

Insulation

Home Builders Like Cooling, February 66
How Much Does Insulation Save In Air Conditioning a Home?, March 66

Insurance

Contractors Get the Picture, June 58
Revise Standard for FHA Insurable Heating and Cooling Equipment, ...May 49
Tough Welding Job, ...September 71
When Is Employer Liable for Employees' Injuries?, ...June 86

Labor

Current Wage Rates Paid Sheet Metal Workers, ...December 106
When Is Employer Liable for Employees' Injuries?, ...June 86

Large Heating Systems

Contractors Get the Picture, June 58
Four Zone Perimeter Heating, January 96
Small Schoolhouse Heated With Perimeter Loop System, August 56
Tripple Barreled Installation for Hard-to-Heat Restaurant, October 131
Up in the Air, ...October 112
Warm Air Perimeter System Heats Basementless Church, ...March 73
Year 'Round Perimeter System for Branch Bank, ...June 48

Legal

Are Verbal Contract Changes Valid?, ...May 95
Cashing in on the New Tax Law, November 75
Cooling Unit Is No "Nuisance," March 82
Dealer Must Pay Sales Commissions, ...April 91
Dealer Pays for Misrepresentations, ...January 128
How Complete Must Customer Instructions Be?, ...November 123
It's Good Business to Incorporate, September 108
Need Landlord's OK for Window Unit?, ...July 98
Reciprocal Licensing — a "Test Run," .....January 121
Revised Tax Law — A Green Light for Business, ...August 39
What Business Costs are Deductible?, ...February 70
When Is Employer Liable for Employees' Injuries?, ...June 86
When You Sign a Lease . . . , October 139
Who Is Responsible for Electric Current Supply?, ...December 108
You May Be Liable, ...August 90

Markets and Market Surveys

"Advancement of the Industry," March 90
Air Conditioning Boom, December 59
Apprentices Needed to Meet Population Growth, ..November 29
Artisan Reports on Window Air Conditioners, ...April 50
Construction Prospects Excellent, June 39
Dealer's Prescription for Growth, July 66
FHA Credit Opens the Door for Dealers, ...December 29
Housing Census Heating Data, January 104
Housing Census Heating Data, March 70
Housing Census Heating Data, July 56
Housing Census Heating Data, August 62
Housing Census Heating Data, September 72
Housing Census Heating Data, October 86
Housing Census Useful to Warm Air Dealer, ...November 89
How Home Owners Like Air Conditioning, ...May 62
Ike Urges More Housing In Two Important Messages, ...February 29
Looking Ahead for '54, ... January 85
More Opportunities in Stainless Steel Specialties, ...May 82
Now That The "Boom" Is Here—Where Will Air Conditioning Be Sold?, ...December 60
Products, Service, Sales Techniques, ...April 107
Residential Air Conditioning—How's It Going?, ...September 69
Residential Cooling Potential Predicted, ...July 68
Selling Mechanical Cooling for Homes in Dry Climates, January 118
Year 'Round Program for Year 'Round Cooling Sales, ...July 60

Meetings and Conventions

"Advancement of the Industry," (Indiana), ... March 90
Association Helps Solve Problems, (Georgia), ...August 94
Contractors Get the Picture, (SMCNA), ...June 58
"Cooling's a Real Market," (Michigan), ...April 95
Cut Distributing Costs, (NASMD), December 114

Dealers Follow Short Course to More Profits, (Wisconsin Short Course), ...October 90
"Education, Research at Peak," (NWAHACA), ...July 70
Guide to the 1954 OHI Convention and Exposition, (OHI Show Section), ...May 128
Heating Wholesalers Told "Cooling Is Good Business," ..January 124
Home Builders Like Cooling, (NAHB), ...February 66
Homer Selch's Scrapbook — a 40 Year Success Story, ...June 62
How to Maintain Sales, (NASMD), June 80
Indiana Dealers Eligible for Tax Refunds, (Indiana), ...August 76
Industrial Ventilation Conference, (Industrial Ventilation Conference), ...August 54
Milwaukee Dealers Go All-Out, (Milwaukee), ...September 70
More Opportunities in Stainless Steel Specialties, (Pennsylvania), May 82
110 Attend Purdue Short Course, (Purdue Short Course), ...July 80
One Method for Figuring Overhead, (Minnesota), ...March 64
Panels Talk About Home Cooling at OHI Meeting, (OHI), ...July 92
Products, Service, Sales Techniques, (Ohio), ...April 107
Residential Cooling Potential, (APC), ...July 68
Success Factors "from A to Z," (Michigan), ...May 86
Take Them All Together—They Spell "Service," (OHI), ...July 91
Tips on Installing, Servicing, Business Methods, (Wisconsin), April 68
Tips on Trouble Shooting, Servicing, (Illinois), ...June 72
Tough Welding Job, (Wisconsin), September 71
Warm Air Convention Packs a "Wham," (NWAHACA), January 102
"We Need More Trained Apprentices," (New York State), February 52
Where Is Our Industry Going?, (NWAHACA), ...November 92

Merchandising

"Advancement of the Industry," March 90
Artisan Reports on Window Air Conditioners, ...April 50
Cold Canvassing = Hot Leads, October 72
Dealer Closes Many Sales, January 94
Dealer Uses TV to Sell Heating, July 75
Frequent Ads Help Dealer, October 93
How Home Owners Like Air Conditioning, ...May 62
How to Replace Cooling System Parts, ...April 66
"Let 'Em Know What You've Got to Sell," ....November 102
Paint Your Portrait With Business Cards, ...October 88
Paraphrases TV Show to Sell Heating, ...March 96
Quality Produces Quantity, September 52
Sell Residential Cooling, ...June 55
Selling Mechanical Cooling for Homes in Dry Climates, January 118
"The Show's the Thing," ....June 47
35 Ways to Increase Sheet Metal Sales, ...October 94
Tips on Trouble Shooting, Servicing, ...June 72
TV Connects to Sell Conversion Jobs, ...August 98
Versatile Dealer Attracts Customers, ...May 70
"Wham"—Sales Punch at Local Level, ...May 65
"Why Stop Neatness at the Sales Level?," ....May 61
Year 'Round Program for Year 'Round Cooling Sales, ...July 60

Metals and Alloys

Atom Improves Metallic Coating Process, ...September 86
Curtain Wall Panels for Skylights, August 64
Cutting and Forming Stainless Steel, ...July 54
Getting a Smooth Finish on Stainless Steel Welds, ...August 68
How to Beat "Price Squeeze," September 66
How to Erect Metal Roof Deck, November 108
How to Solder Stainless Steel, September 102
How to Surface-Finish Stainless Steel, ...November 72
Making a Slip Lock Duct Fastener, ...September 100
More Opportunities in Stainless Steel Specialties, ...May 82
New Roof Keeps "the Old Look," February 48
Plant Expansion Easier With Curtain Wall Panels, ...June 52
Producing 15,000 Lb of Duct per Day, ...June 68
Repairing the Roof Over Our Head of State, ...January 110
Restrictions Off Nickel and Nickel Bearing Steel, ...January 39
Roofing with Longer Terne Sheets, November 116
Sheet Metal Contractor Reviews Copper Roofing Film, December 112
Sheet Metal Shop Its Own Best Ad, ...April 62
Sheet Metal Shop Produces "Just What the Customer Orders," March 58
Tips on Trouble Shooting, Servicing, ...June 72
"World's *Biggest* Sheet Metal Job," ....August 84

Modernization

New Roof Keeps "the Old Look," February 48
Use Sales Tools to Build Volume, September 82

Pattern Development

Developing a Layout for a Tapered Shoe Tee, ...December 76
Dust Collector Inlet Arm, September 94
Grinder Suction Hood Guard, November 94
Making a Double Elbow with Different Size Branch Ducts, February 54
Making an Inlet Arm for a Dust Separator, ...August 58
Making a 90 Deg Offset Elbow, July 62
Making a 90 Deg Riser Hood, May 78
Making a Polishing Wheel Guard and Hood, ...October 81
Making a Slip Lock Duct Fastener, September 100
Making a Three Piece 90 Deg Square to Round Elbow Hood, June 64
Making a Two Piece 90 Deg Elbow, ...July 100
Making a Ventilator Base for Roof Peaks, ...March 76
Special Hood for Partly Round Tank, ...January 112

Perimeter Heating Systems

Four Zone Perimeter Heating, January 96
How to Control Moisture in Heated and Unheated Crawl Spaces, ...May 74
Modern Home Heated with Perimeter Warm Air System, ...July 52
Perimeter Heating for Crawl Space Homes, ...March 62
Perimeter System Used in "House of Ideas," ....December 75
Small Schoolhouse Heated With Perimeter Loop System, August 56
Versatile Dealer Attracts Customers, ...May 70
Warm Air Perimeter System Heats Basementless Church, ...March 73
What to Do When Installing a Crawl Space Heating System, November 84

Prefabrication

5¼ Hours to Install Warm Air Heating System, ...February 40
Plant Expansion Easier With Curtain Wall Panels, ...June 52
Producing 15,000 Lb of Duct per Day, ...June 68
Sheet Metal Installed by "Remote Control," ....July 82

Promotion

Frequent Ads Help Dealer, October 93
Paint Your Portrait With Business Cards, ...October 88

35 Ways to Increase Sheet Metal Sales, ...October 94
What's Your Best Advertising Medium?, ...March 74

Public Relations

Dealer Closes Many Sales, January 94
How to Check and Balance Warm Air Heating Systems, ...May 66
How to Have a Successful Employees' Christmas Party, November 86
Quality Produces Quantity, September 52
Sheet Metal Shop Proves—"Versatility Brings Success," January 108
"Wham"—Sales Punch at Local Level, ...May 65

Radio and TV

Dealer Uses TV to Sell Heating, July 75
Sell Residential Cooling, ...June 55
TV Connects to Sell Conversion Jobs, ...August 98

Research

"Education, Research at Peak," July 70
Heated Slab, Baseboard Registers Maintain Low Temperature Differentials, ...February 50
How Much Does Insulation Save in Air Conditioning a Home?, March 66
How Much More Heat Needed for Outside Air Intakes?, ...January 86
Slab Floor Heat Losses Reduced with Edge Insulation, ...January 106
Solving Crawl Space Heating Problems, ...April 64
Studies Air Pressure Loss in Louvers, ...March 75

Roofing

New Roof Keeps "the Old Look," February 48
Repairing the Roof Over Our Head of State, ...January 110
Roofing with Longer Terne Sheets, November 116

Selling

Artisan Reports on Window Air Conditioners, ...April 50
Cold Canvassing = Hot Leads, October 72
Dealer Closes Many Sales, January 94
Dealer Must Pay Sales Commissions, ...April 91
Products, Service, Sales Techniques, ...April 107
Sell Residential Cooling, ...June 55
Selling Mechanical Cooling for Homes In Dry Climates, January 118
Success Factors "from A to Z," May 86
Take Them All Together—They Spell "Service," ....July 90
35 Ways to Increase Sheet Metal Sales, ...October 94
TV Connects to Sell Conversion Jobs, ...August 98
Use Sales Tools to Build Volume, September 82
"Wham"—Sales Punch at Local Level, ...May 65
What's Your Best Advertising Medium?, ...March 74
"Why Stop Neatness at the Sales Level?," ....May 61
Year 'Round Program for Year 'Round Cooling Sales, ...July 60

Servicing

Artisan Reports on Window Air Conditioners, ...April 50
Case of the Poorly Heated Parsonage, ...December 74
Cold Canvassing = Hot Leads, October 72
Contractors Get the Picture, June 58
Cooling System Trouble Shooting, March 56
Dealer's Prescription for Growth, July 66
Electrical Wiring for Window Air Conditioners, ...April 59
How Metering Devices Keep Cooling Coils Efficient, ..August 48
How to Diagnose What's Wrong in an Air Conditioning System, February 44
How to Replace Cooling System Parts, ...April 66
How to Select Wall Furnaces, August 52
How to Service Evaporative Coolers, ...July 79
How to Service Hermetic Units, July 48
Products, Service, Sales Techniques, ...April 107
Reduce Excessive Heat Loss and Smoke, ...September 91
Replacing Parts in Sealed Cooling Systems, ...May 72
Service Department Can Pay Its Way, ...February 39
Success Factors "from A to Z," May 86
Techniques for Charging a Refrigerating System, ...December 80
Tips on Installing, Servicing, Business Methods, ...April 68
Tips on Trouble Shooting, Servicing, ...June 72
Where to Look for Air Conditioning Troubles, ...November 79
Year 'Round Program for Year 'Round Cooling Sales, ...July 60

Sheet Metal—Architectural

Curtain Wall Panels for Skylights, August 64
New Roof Keeps "the Old Look," February 48
Plant Expansion Easier With Curtain Wall Panels, ...June 52
Repairing the Roof Over Our Head of State, ...January 110
Sheet Metal Contractor Reviews Copper Roofing Film, December 112
Sheet Metal Shop Its Own Best Ad, ...April 62
Versatile Dealer Attracts Customers, ...May 70

Sheet Metal Finishing

English Sheet Metal Work Is Different, ...May 90
Getting a Smooth Finish on Stainless Steel Welds, ...August 68
How to Solder Stainless Steel, September 102
How to Surface-Finish Stainless Steel, ...November 72
Repairing the Roof Over Our Head of State, ...January 110
Sheet Metal Shop Produces "Just What the Customer Orders." March 58

Showrooms

Cold Canvassing = Hot Leads, October 72
Dealer Closes Many Sales, January 94
Sheet Metal Shop Its Own Best Ad, ...April 62
"The Show's the Thing," ....June 47
35 Ways to Increase Sheet Metal Sales, ...October 94

Slab Heating Systems

How to Reduce Heat Losses from Heated Crawl Spaces, ...June 56
Slab Floor Heat Losses Reduced with Edge Insulation, ..January 106
Small Schoolhouse Heated With Perimeter Loop System, ..August 56
Warm Air Perimeter System Heats Basementless Church, ...March 73
Year 'Round Perimeter System for Branch Bank, ...June 48

Soldering

How to Solder Stainless Steel, September 102
Sheet Metal Shop Produces "Just What the Customer Orders," March 58

Taxes

Cashing in on the New Tax Law, November 75
Indiana Dealers Eligible for Tax Refunds, ...August 76
Revise Standards for FHA Insurable Heating and Cooling Equipment, ...May 49
Revised Tax Law—A Green Light for Business, ...August 39
Save Cash for Employees Under New Tax Law, ...December 88
Success Factors "from A to Z," May 86
What Business Costs Are Deductible?, ...February 70

Trade Practice Rules

Dealers Follow Short Course to More Profits, ...October 90
FTC Helps Maintain Heating Standards, ...September 27
How to Maintain Sales, ...June 80

Training

Contractors Get the Picture, ..June 58
Dealer's Prescription for Growth, July 66
"Education, Research at Peak," July 70
Industrial Ventilation Conference, August 54
110 Attend Purdue Short Course, July 80
On Picking the Right Man, October 71

Ventilation

Case of the Poorly Heated Parsonage, ...December 74
How Much More Heat Needed for Outside Air Intakes?, ...January 86
Industrial Ventilation Conference, August 54
Making a Ventilator Base for Roof Peaks, ...March 76
Modern Ductwork—New Techniques, New Problems, February 58
Philadelphia Fights Air Pollution, September 100
Providing Ventilation, Combustion Air for Confined Heating Units, October 84
Tips on Installing, Servicing, Business Methods, ...April 68

Wage Incentives

Cites Benefits of Incentive Program, ...September 106

Washington Letter

Apprentices Needed to Meet Population Growth, ...November 29
Argue for "Bid-Peddling" Bill, March 41
Construction Prospects Excellent, June 39
FHA Credit Opens the Door for Dealers, ...December 29
FHA Loan Hearings Turn Up Abuses—May Mean Revamp of Agency, ...October 29
FTC Helps Maintain Heating Standards, ...September 27
How BDSA Helps Business, July 39
Ike Urges More Housing In Two Important Messages, ...February 29
New Housing Act to Affect Loans, April 41
Restrictions Off Nickel and Nickel Bearing Steel, ...January 39
Revise Standards for FHA Insurable Heating and Cooling Equipment, ...May 49
Revised Tax Law—A Green Light for Business, ...August 39

Welding

Coated Electrodes Speed Welding, May 80
Curtain Wall Panels for Skylights, August 64
Getting a Smooth Finish on Stainless Steel Welds, ...August 68
How to Erect Metal Roof Deck, November 108
More Opportunities in Stainless Steel Specialties, ...May 82
Producing 15,000 Lb of Duct per Day, ...June 68
Sheet Metal Shop Produces "Just What the Customer Orders," March 58
Tough Welding Job, ...September 71

Wholesaler Operations

Cut Distributing Costs, December 114
FTC Helps Maintain Heating Standards, ...September 27
Heating Wholesalers Told "Cooling Is Good Business," January 124
How to Maintain Sales, ...June 80

INDEX OF AUTHORS

Baker, C. T.
Case of the Poorly Heated Parsonage, ...December 74
How to Select Wall Furnaces, August 52
Reduce Excessive Heat Loss and Smoke, ...September 91

Biddle, N. J.
Reciprocal Licensing—a "Test Run," ....January 121

Borkat, Philip
Combination Load Estimating Form, ...July 59

Burdick, Glydewell
How a Heat Pump Meets Heating, Cooling Needs in Cold Climates, ...December 99

Campbell, E. K.
"I'd Use Crawl Space for Return Air," ....October 144

DeRoo, Wm. C.
Modern Home Heated with Perimeter Warm Air System, ...July 52

Dreher, A. H.
Frequent Ads Help Dealer, October 93

Farrar, John
Plant Expansion Easier with Curtain Wall Panels, ...June 53

Franck, Peter
Economical Duct Layouts, January 98

Gichner, Lawrence E.
English Sheet Metal Work Is Different, ...May 90
Help Yourself to Extra Shop Time, ...September 56
How to Have an Employees' Christmas Party, ...November 86
New Roof Keeps "the Old Look," February 48
Paint Your Portrait With Business Cards, ...October 88
Producing 15,000 Lb of Duct per Day, ...June 68
Repairing the Roof Over Our Head of State, ...January 110
Sheet Metal Contractor Reviews Copper Roofing Film, December 112
Sheet Metal Installed by "Remote Control," ....July 82
What's Your Best Advertising Medium? ....March 74
"World's Biggest Sheet Metal Job," ....August 84

Gilkey, H. T.
How Much Does Insulation Save in Air Conditioning a Home?, March 66
How to Control Moisture in Heated and Unheated Crawl Spaces, ...May 74
How to Reduce Heat Losses from Heated Crawl Spaces, ...June 56
Perimeter Heating for Crawl Space Homes, ...March 62
Solving Crawl Space Heating Problems, ...April 64

Gilman, S. F.
Room Air Distribution for Year 'Round Air Conditioning, October 116

Gray, Albert W.
Are Verbal Contract Changes Valid?, ...May 95
Cooling Unit Is No "Nuisance," March 82
Dealer Must Pay Sales Commissions, ...April 91
Dealer Pays for Misrepresentations, ...January 128
How Complete Must Customer Instructions Be?, ...November 123
It's Good Business to Incorporate, September 108
Need Landlord's OK for Window Air Conditioning Unit?, July 98

What Business Costs Are Deductible?, ...February 70
When Is Employer Liable for Employees' Injuries?, ...June 86
When You Sign a Lease . . ., October 139
Who Is Responsible for Electric Current Supply?, ...December 108
You May Be Liable, ...August 90

Haas, R. E.
Getting a Smooth Finish on Stainless Steel Welds, ...August 68

Hertzler, John R.
Now That the Boom Is Here —Where Will Air Conditioning Be Sold?, ...December 60

Hoeing, W. J.
Use Sales Tools to Build Volume, September 82

Holton, Alice
Triple-Barreled Installation for Hard-to-Heat Restaurant, October 131

Kartorie, V. T.
Now That the Boom Is Here— Where Will Air Conditioning Be Sold?, ...December 60

Kobak, James B.
Cutting Costs Under the New Tax Law, ...November 75
Save Cash for Employees Under New Tax Law, ...December 88

Konzo, S.
Heated Slab, Baseboard Registers Maintain Low Temperature Differentials, ...February 50
How to Control Moisture in Heated and Unheated Crawl Spaces, ...May 74
How to Reduce Heat Losses from Heated Crawl Spaces, ...June 56
Perimeter Heating for Crawl Space Homes, ...March 62
Solving Crawl Space Heating Problems, ...April 64

Kruckman, Arnold
Apprentices Needed to Meet Population Growth, ...November 29
Argue for "Bid-Peddling" Bill, March 41
Construction Prospects Excellent, June 39
FHA Credit Opens the Door for Dealers, ...December 29
FHA Loan Hearings Turn UP Abuses—May Mean Revamp of Agency, ...October 29
FTC Helps Maintain Heating Standards, ...September 27
How BDSA Helps Business, July 39
Ike Urges More Housing In Two Important Messages, February 29
New Housing Act to Affect Loans, April 41
Restrictions Off Nickel and Nickel Bearing Steel, ...January 39
Revise Standards for FHA Insurable Heating and Cooling Equipment, ...May 49
Revised Tax Law — A Green Light for Business, ...August 39

Krueger, A. T.
How to Install Metal Roof Deck, November 108

Moogk, Robert
Local Newspaper, TV Ads, Sell Residential Cooling, ...June 55

Morey, Dan
How to Service Evaporative Coolers, ...July 79

Paul, Lawrence O.
Modern Ductwork — New Techniques, New Problems, February 58

Polland, Jerry
Venting Gas Fired Heating Equipment, ...September 63

Rains, E. M.
Cutting and Forming Stainless Steel, ...July 54
How to Solder Stainless Steel, September 102
How to Surface-Finish Stainless Steel, ...November 72

Reid, Hugh B.
Details for Making a Grinder Suction Hood Guard, ...November 94
Developing a Layout for a Tapered Shoe Tee, ...December 76
Dust Collector Inlet Arm, September 94
Making a Double Elbow with Different Size Branch Ducts, February 54
Making a Horn Boot Fitting, April 130
Making an Inlet Arm for a Dust Separator, ...August 58
Making a 90 Deg Offset Elbow, July 62
Making a 90 Deg Riser Hood, May 78
Making a Polishing Wheel Guard and Hood, ...October 81
Making a Three Piece 90 Deg Square to Round Elbow Hood, June 64
Making a Two Piece 90 Deg Elbow, ...July 100
Making a Ventilator Base for Roof Peaks, ...March 76
Special Hood for Partly Round Tank, ...January 112

Reid, S. W.
Cooling System Trouble Shooting, March 56
How Home Cooling Systems are Lubricated, ...October 76
How to Add Cooling to Home Built on Crawl Space, ...January 91
How to Diagnose What's Wrong in an Air Conditioning System, February 44
How Metering Devices Keep Cooling Coils Efficient, ..August 48
How to Replace Cooling System Parts, ...April 66
How to Service Hermetic Units, July 48
Know Your Refrigerants, September 74
Replacing Parts in Sealed Cooling Systems, ...May 72
Techniques for Charging a Refrigerating System, ...December 80
Where to Look for Air Conditioning Troubles, ...November 79
Year 'Round Perimeter System for Branch Bank, ...June 49

Runquist, Ralf E.
Dealer Uses TV to Sell Heating, July 75

Schlue, Joseph H. W.
Dealer Keeps Ideas on Tap, March 84

Seltz, D. D.
35 Ways to Increase Sheet Metal Sales, ...October 94

Smoot, T. H.
Tells Michigan Association "Cooling's a Real Market," ....April 95

Straub, H. E.
Room Air Distribution for Year 'Round Air Conditioning, October 116

Trese, T. E.
Suspended Furnaces for Super Market, ...October 112

Veverka, A. L.
Roofing with Longer Terne Sheets, November 116

Voorhees, Guy
How Much More Heat Needed for Outside Air Intakes?, January 86

Welch, Robert F.
Dealer's Prescription for Growth, July 66
Quality Installation, Servicing, Produces Quantity of Business, September 52
Selling Mechanical Cooling for Homes in Dry Climates, January 118

Wyckoff, P. W.
How to Team Up Heating and Cooling, ...August 71
You Can Guarantee Year 'Round Comfort, ...September 60